

REMARKS

In response to the Office Action mailed February 14, 2011, favorable reconsideration of the subject application is respectfully requested in view of the above amendments and the following remarks. By the above amendment, claims 1, 8 and 11 have been amended for purposes of clarity and to advance prosecution. Claims 4, 5, 9, 10 and 13 have been cancelled. Support for the amendments may be found throughout the specification and claims as originally filed. Moreover, these amendments are not to be confused with acquiescence to the Examiner's stated grounds for rejection and are made without prejudice to prosecution of any subject matter removed or modified by this amendment in a related application. Following the amendments, claims 1-3, 6-8, 11-12 and 14-25 are pending in the application, with claims 16-25 withdrawn from consideration by the Examiner as allegedly being directed to non-elected subject matter.

Specification

The specification has been objected to on the basis that (1) page 62, line 23, refers to Figure 1; however, according to the Examiner, the application does not contain drawings; (2) the specification refers to nucleotides 54-3675 of the sequence set forth in SEQ ID NO: 3 (page 3, line 26; page 4, line 8), however, according to the Examiner, SEQ ID NO: 3 only contains nucleotides 1-3584; (3) the specification contains an embedded hyperlink and/or other form of browser executable code at page 9, line 17; and (4) the specification contains trademarked terms at page 23, lines 11 and 29 and at page 62, lines 11 and 28, that should be capitalized (*i.e.*, GENBANK, SUPERFECT and ADEASY).

By the above amendment, for purposes of clarity and to advance prosecution, the specification has been amended by deleting reference to Figure 1 at page 62, line 23. In addition, reference to residues 54-3675 of SEQ ID NO: 3 has been removed. Finally, the specification has been amended, as requested by the Examiner, to remove an embedded hyperlink and to capitalize the noted trademarked terms. Reconsideration and withdrawal of these objections is respectfully requested.

Claim Objections

The Examiner's objections against claims 4, 5, 9, 10 and 13 as allegedly being of improper dependent form for failing to further limit the subject matter of a previous claim are submitted to be moot in light of Applicants' amendment cancelling these claims.

Claims 6, 11 and 14 also stand objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. More specifically, according to the Examiner, claim 6 depends from claim 1, which requires an expression cassette comprising from 5' to 3' the following elements: a CMV promoter sequence, a CMV enhancer sequence, a CMV intron A sequence, a heterologous nucleic acid sequence, and a polyadenylation site. In addition, according to the Examiner, the sequence of SEQ ID NO: 3 contains the following from 5' to 3': a CMV promoter sequence, a CMV enhancer sequence, a CMV intron A sequence from the CMV major immediate early gene, a multiple cloning site, and a polyadenylation site. According to the Examiner, SEQ ID NO: 3 does not contain a heterologous nucleic acid sequence but instead contains a multiple cloning site. On this basis, the Examiner alleges that dependent claim 6 is improper for not further limiting the subject matter of the claim from which it depends. This rejection is traversed.

Claim 1, as presently amended, requires an expression cassette comprising from 5' to 3' the following elements: a CMV promoter sequence, a CMV enhancer sequence, a CMV intron A sequence from the CMV major immediate early gene, a heterologous nucleic acid sequence, and a polyadenylation site, wherein the promoter is operably linked to the heterologous nucleic acid sequence, and wherein the expression cassette comprises nucleotides 1-1653 of the sequence set forth in SEQ ID NO: 3.

Claim 6, which depends from claim 1, further requires that the expression cassette comprises the full sequence set forth in SEQ ID NO: 3. In this respect, claim 6 is further limiting in relation to claim 1 in that it requires additional sequence from SEQ ID NO: 3, *i.e.*, the full length sequence of SEQ ID NO: 3. Thus, claim 6 is indeed further limiting with respect to claim 1 from which it depends and is submitted to be proper in terms of both form and content, irrespective of whether SEQ ID NO: 3 contains a heterologous sequence or a multiple cloning site. In other words, it is certainly appropriate in a dependent claim to narrow certain features of

a claim from which it depends without narrowing all features. Here, claim 6 further limits claim 1 by requiring additional sequence of SEQ ID NO: 3. Given this clear narrowing of specific elements of claim 1, it is certainly not required that a heterologous sequence be present and specified in SEQ ID NO: 3 in order for claim 6 to further narrow certain features of claim 1 but not others. Reconsideration and withdrawal of this rejection is respectfully requested.

Rejection under 35 USC 101

The Examiner's rejection against claims 8-14 under 35 USC 101 is submitted to be moot in light of Applicants' amendments to these claims clarifying the claimed host cell is an *isolated* host cell. Withdrawal of this rejection is requested.

Rejection under 35 USC 112, first and second paragraphs

The Examiner's rejections against claims 4, 9 and 13 under 35 USC 112, first and second paragraphs (pages 7-9 of Office Action), are submitted to be moot in light of Applicants' amendment cancelling these claims. Withdrawal of these rejections is requested.

Rejection under 35 USC 102

Claims 1-3, 8, 12 and 15 stand rejected under 35 USC § 102(e) as allegedly being anticipated by Thudium *et al.* (US2005/0079488). More specifically, according to the Examiner, Thudium *et al.* teach a composition comprising an expression vector comprising an expression cassette, where the expression cassette comprises from 5' to 3' the following elements: a CMV promoter sequence, a CMV enhancer sequence, which can be part of an intron A sequence, a CMV intron A sequence from the CMV major immediate early gene, a heterologous nucleic acid sequence, and a polyadenylation site, where the promoter is operably linked to the heterologous nucleic acid sequence. This rejection is traversed.

By the above amendment, for purposes of clarity and to advance prosecution, claim 1 has been amended such that the expression cassette must necessarily contain nucleotides 1-1653 of the sequence set forth in SEQ ID NO: 3. As Thudium *et al.* does not disclose a sequence containing nucleotides 1-1653 of SEQ ID NO: 3, the reference fails to anticipate the

present claims. Reconsideration and withdrawal of this rejection is therefore respectfully requested.

Rejection under 35 USC 103

Claim 7 stands rejected under 35 USC § 103 as allegedly being obvious over Thudium *et al.* (US2005/0079488) in view of Wang *et al.* (US Patent No. 6,518,256). More specifically, according to the Examiner, although Thudium *et al.* does not teach an expression vector, where the cancer antigen is encoded by the nucleotide sequence of SEQ ID NO: 6, Wang *et al.* allegedly teaches vaccines for immunotherapy of lung cancer comprising DNA molecules encoding a lung tumor protein encoded by SEQ ID NO: 347, which according to the Examiner, is a sequence related to presently claimed SEQ ID NO: 6. On this basis, the Examiner concludes that it would have been obvious to modify the expression vector of Thudium *et al.* to include the nucleic acid of SEQ ID NO: 347 encoding a cancer antigen as recited in present claim 7. This rejection is traversed.

The deficiencies of Thudium *et al.* were noted above. More specifically, Thudium *et al.* does not disclose a sequence containing nucleotides 1-1653 of SEQ ID NO: 3, as required by claim 1 (from which claim 7 indirectly depends). Moreover, the deficiencies of Thudium *et al.* are certainly not remedied by the disclosure of Wang *et al.*, as Wang *et al.* also does not teach or suggest a sequence containing nucleotides 1-1653 of SEQ ID NO: 3. As the disclosures of Thudium *et al.* and Wang *et al.*, whether considered separately or combined, fail to teach or suggest the element of Applicants' claims requiring the presence of a sequence containing nucleotides 1-1653 of SEQ ID NO: 3, these references fail to render obvious Applicants' claims. Nothing in these references would lead a skilled artisan with any reasonable expectation of success to the invention as it is presently claimed by Applicants. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,
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